

REMARKS

Applicants have carefully reviewed this Application in light of the Office Action mailed September 27, 2007. Claims 1-37 are pending in this Application. Claims 1-12 and 21-33 were previously withdrawn due to an election/restriction requirement. Claims 13-20 and 34-37 stand rejected under 35 U.S.C. § 103(a). Applicants respectfully request reconsideration and favorable action in this case.

Rejections under 35 U.S.C. § 103

Claims 13-20, 34, and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,537,669 issued to David M. Evans et al. (“*Evans*”) in view of U.S. Patent No. 4,725,142 issued to Mark Sharnoff (“*Sharnoff*”).

Claims 35 and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Evans* in view of *Sharnoff* and in further view of U.S. Patent No. 6,628,845 issued to Harold S. Stone et al. (“*Stone*”).

Evans discloses a hybrid technique for finding defects on digitized device images using a combination of spatial domain and frequency domain techniques. (Col. 2, lines 57-60). The two dimensional spectra of two images are found using Fourier-like transforms. (Col. 2, lines 60-61). Any strong harmonics in the spectra are removed, using the same spectral filter on both spectra. (Col. 2, lines 61-63). The images are then aligned, transformed back to the spatial domain, then subtracted. (Col. 2, lines 63-64).

Sharnoff discloses a technique for the study of strains imposed by stress utilizing differential holography. (Col. 1, lines 26-37).

Claim 13 and 17 each recite a method for registering holographic images including “calculating a confidence value based on [a] magnitude operation” and “determining the acceptability of the correspondence between [a] first holographic image and [a] second holographic image based upon the confidence value.”

Applicants respectfully submit that there is no motivation, teaching, or suggestion in the cited art to combine references. In addition, even assuming *arguendo* that the combination of *Evans* and *Sharnoff* is proper (which Applicants do not concede), Applicants submit that the combination of *Evans* and *Sharnoff* fails to teach, disclose or suggest all of the

elements of the claimed embodiment of the invention. Specifically, *Evans* and *Sharnoff*, alone or in combination, fail to teach, disclose or suggest a method for registering holographic images including “calculating a confidence value based on [a] magnitude operation,” as recited by Claims 13 and 17.

In rejecting Claims 13 and 17, the Examiner for the first time alleges that Col. 20, lines 53-55, and Col. 21, lines 39-41 and 44-50 of *Evans* disclose a method for registering holographic images including “calculating a confidence value based on [a] magnitude operation.” (Office Action, Pages 4 and 6). However, the portions of *Evans* cited by the Examiner merely disclose the following:

... calculate any offset that exists between the images of the two fields of view FOV1 and FOV2 ... [Col. 20, lines 53-55]

The lower portion of the third column of FIG. 1, as discussed above, is provided to present the difference between FOV1' and FOV2' in the spatial domain ... [Col. 21, lines 39-41]

One implementation for performing that function us shown in FIG. 9b with FOV1' and FOV2' applied to adder 606 to form the difference image. The combined image is then applied to blocks 608-622, which function in the same way as blocks 136-150 of FIG. 5 to provide the defects which are presumed to be the differences between FOV1' and FOV2'. [Col. 21, lines 44-50]

Thus, the cited portions of *Evans* merely teach generating defect lists for two images. The cited portions of *Evans*, in addition to the remainder of *Evans*, however, fail to disclose the calculation of a confidence value, much less a confidence value calculated based on a magnitude operation, or the acceptability of coherence between two images based on a calculated confidence value. Therefore, *Evans* fails to teach or suggest “calculating a confidence value based on [a] magnitude operation,” or “determining the acceptability of the correspondence between [a] first holographic image and [a] second holographic image based upon the confidence value,” as recited in Claims 13 and 17. For at least these reasons, Applicants respectfully submit that Claims 13 and 17 are not rendered obvious by the combination of *Evans* and *Sharnoff*.

Given that Claims 14-16 and 34-35 depend from Claim 13 and Claims 18-20 and 36-37 depend from Claim 17, Applicant submits that Claims 14-16, 18-20 and 34-37 are also

allowable. As such, Applicant respectfully requests reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) and full allowance of Claims 13-20 and 34-37, as amended.

CONCLUSION

Applicants appreciate the Examiner's careful review of the application. Applicants have now made an earnest effort to place this case in condition for examination and allowance. For the foregoing reasons, Applicants respectfully request reconsideration of the rejections and full allowance of Claims 13-20 and 34-37.

Applicants believe there are no fees due at this time, however, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 50-2148 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.2581.

Respectfully submitted,
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